MAR 2 0 2006

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05) Approved for use through xx/xx/200x, OMB 0851-00xx

U.S. Patent and Trademerk Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Docket Number (Optional) PRE-APPEAL BRIEF REQUEST FOR REVIEW 60,137-245; 185**-**3067 Filed Application Number CERTIFICATE OF FACSIMILE I hereby certify that this Pre-Appeal Brief Request For Review and 10/781,411 2/18/2004 Notice of Appeal are being facsimile transmitted to (571) 273-8300. March 20: 2006 First Named Inventor Li Preti Art Unit Examiner Typed or printed Laura Combs Emmanuel S. Luk 1722 Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the applicant/inventor. ature assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. Matthew L. Koziarz Typed or printed name (Form PTO/\$8/96) 248 988 8360 allomey or agent of record. 53,154 Registration number Telephone number attorney or agent acting under 37 CFR 1.34. March 20, 2006 Registration number if acting under 37 CFR 1.34 NOTE: Signatures of all the Inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below. *Total of forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the complete opposition form to the USPTO. Three will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tradomark Office, U.S. Department of Commorce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, cell 1-800-PTO-9199 and select option 2.

RECEIVED CENTRAL FAX CENTER

MAR 2 0 2006

60137-245/185-3067 Serial No. 10/781,411, filed 2/18/04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Alfredo Li Preti

Serial No.:

10/781,411

Group Art Unit:

1722

Examiner:

Emmanuel S. Luk

Filed:

2/18/2004

Title:

SELF-CLEANING MOLD VALVE WITH AIR INJECTION SYSTEM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

In response to the final Office Action of November 18, 2005, applicant respectfully submits a Pre-Appeal Brief Request For Review. This request is being filed with a Notice of Appeal. The Review is requested for the reasons set forth below.

Issue I.

Claims 1, 2, 4-10, 15, and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Nennecker* (5,498,151) in view of *Csongor* (5,939,015). Applicant's independent claims and an illustrative figure are reproduced below for convenience. As will be explained in further detail, the Examiner has failed to show proper motivation for making the proposed combination.

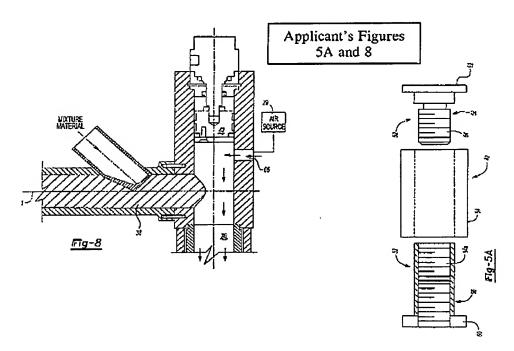
60137-245/185-3067 Serial No. 10/781,411, filed 2/18/04

- 1. (Original) A mold valve assembly for a molding system comprising:
 - a mold valve chamber comprising an output port, said mold valve chamber defining a first axis;
 - an injection chamber in communication with said mold valve chamber, said injection chamber defining a second axis transverse to said first axis;
 - an injection piston movable within said injection chamber, an end segment of said injection piston movable to define a portion of a mold valve chamber inner perimeter; and

an air injection system in communication with said mold valve chamber.

- 6. (Currently Amended) A molding system comprising:
- a mold assembly which defines a mold cavity;
- a mix head assembly selectively mountable to said mold assembly said mold valve assembling including a mold valve chamber in communication with an injection chamber; and

an air injection system in communication with said mold valve assembly to selectively inject air into said mold through said mold valve chamber of said mold valve assembly.



60137-245/185-3067 Serial No. 10/781,411, filed 2/18/04

Nennecker discloses a piston (21) that moves within a chamber (36) to dispense heated plastic material into a mold (22). Figure 1 of Nennecker (reproduced below) shows a tight fit between the piston (21) and the walls of the chamber (36) that functions to displace any residual material in the chamber (36) and force the residual material into the mold [col.4, lines 64-65]. This prevents unreacted material in the mixture, which is detrimental to the molded product.

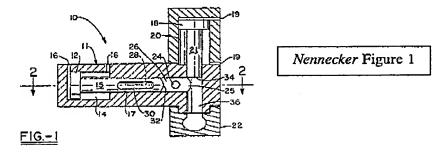


Figure 2 of Csongor is reproduced below. Csongor discloses an injection molding apparatus having a hole 12 that extends through a plasticating screw 14 for introducing high-pressure gas, vapors, or liquid into a melt.



The Examiner argues that it would have been obvious to provide the piston (21) of Nennecker with the gas introduction system of Csongor to allow gas injection into the mold. There is no motivation to make this combination. The materials in Nennecker are doubly mixed in the chamber 26 [col.6, lines 19-28]. If the piston (21) of Nennecker was provided with the hole of Csongor for gas introduction, gas would be introduced into the chamber 36 and would not undergo the double mixing. This would defeat the goal in Nennecker of thoroughly double mixing the

60137-245/185-3067 Serial No. 10/781,411, filed 2/18/04

materials. For this reason, there is no motivation to make the combination and claims 1, 2, 4-10, 15, and 17 are properly allowable.

Issue II.

The Examiner also has made a clear error in rejecting claim 4 under 103(a) by failing to consider a limitation of claim 4 in the cited references. Claim 4 recites that said piston is selectively moveable to block an air inlet through said mold valve chamber. In Csongor, air pressure or a spring-loaded mechanical actuation blocks the gas from introduction into the melt [see col. 5, lines 55-59]. Thus, piston movement in Csongor simply cannot block the air inlet, as recited in Applicant's claim 4. For this additional reason, claim 4 is properly allowable.

Issue III.

The Examiner made a clear error rejecting claims 3 and 16 by failing to consider a limitation recited in claims 3 and 16 in the cited reference. Claims 3 and 16 were rejected under 103(a) as being unpatentable over *Nennecker* in view of *Csongor*, and further in view of *Takizawa*. Applicant's claims recite a mold valve piston (42) comprises a non-metallic portion (54) between a first metallic portion and a second metallic portion (56 and 58).

Figure 5 of *Takizawa*, et al is reproduced below. *Takizawa*, et al discloses a piston (32) having scal rings (31).

14 31 / 34 11 25 35 4

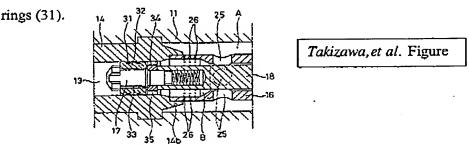


Fig. 5

The Examiner contends the seal rings (31) and piston (32) of *Takizawa*, et al. are equivalent to Applicant's non-metallic portion being between metallic portions. The Examiner

Dated: March 20, 2006

60137-245/185-3067 Serial No. 10/781,411, filed 2/18/04

argued that it would have been obvious to provide Nennecker with the seal rings (31) and piston (32) of Takizawa, et al. to seal the chamber (36). However, Takizawa, et al. does not even disclose that the piston (32) is metallic or that the seal rings (31) are non-metallic. Accordingly, the rejection fails to disclose all of the limitations of Applicant's claims 3 and 16.

Additionally, there is no motivation for making the proposed combination. Figure 1 of Nennecker shows a tight fit between the piston (21) and the walls of the chamber (36) that already provides sealing to prevent unreacted material from remaining in the chamber (36). Since the tight fit already achieves the desired effect, one would not need to use the sealing rings or even expect to improve the sealing with the sealing rings. The ability to add the sealing rings is not proper support for a 103(a) rejection, there must be motivation. Accordingly, claims 3 and 16 are properly allowable.

Respectfully submitted,

Matthew L. Koziarz, Reg. No. 53,154

Carlson, Gaskey & Olds

400 W. Maple Road, Ste. 350

Birmingham, MI 48009

(248) 988-8360

CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (571) 273-8300, on March 20, 2006.

Laura Combs